

1

## ABSTRACT OF THE DISCLOSURE

2

3           The invention provides a method and system for scheduling tasks in an MP  
4       system, and provides parallel execution of those tasks while implicitly synchronizing ac-  
5       cess to resources used by that system. Tasks in the system are each assigned to a sched-  
6       uling domain, thus associating those tasks with a set of resources controlled by that do-  
7       main. A scheduler operating at each processor implicitly synchronizes those resources  
8       controlled by each domain, by scheduling only one task for each domain to execute con-  
9       currently in the system. Because each instance of the scheduler selects which task is next  
10      run independently of its processor, each domain can migrate from one processor to an-  
11      other; thus, each domain can have a task executing on any processor, so long as no do-  
12      main has two tasks executing concurrently in the system. Thus, domains are not bound to  
13      any particular processor. Hence the method and system are symmetric.

5  
6  
7  
8  
9  
10  
11  
12  
13